

Appl. No. : 10/017,920
Filed : December 11, 2001

AMENDMENTS TO THE CLAIMS

1. (PREVIOUSLY PRESENTED) An accommodating intraocular lens for implantation in an eye having an optical axis, said lens comprising:

an anterior portion comprised of a viewing element, said anterior viewing element comprised of an optic having a refractive portion with a refractive power of less than 55 diopters;

a posterior portion comprised of a viewing element;

said lens having an optical axis which is adapted to be substantially coincident with the optical axis of the eye upon implantation of said lens;

said posterior viewing element comprising an optic arranged substantially coaxially with said anterior optic on said optical axis of said lens, said posterior optic having a larger diameter than said refractive portion of said anterior optic, said posterior optic comprising a peripheral portion having positive refractive power and extending radially away from said optical axis of said lens beyond the periphery of said refractive portion of said anterior optic, so that at least a portion of the light rays incident upon the posterior optic can bypass said refractive portion of said anterior optic;

wherein said anterior optic and said posterior optic are configured to move relative to each other along said optical axis of said lens between an accommodated state and an unaccommodated state in response to force on said intraocular lens by the ciliary muscle of the eye, said anterior optic and said posterior optic being separated when in the accommodated state.

2. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein said refractive portion of said anterior optic has a diameter of about 3 millimeters or less.

3. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein said anterior optic further comprises a peripheral portion extending radially outward from said refractive portion away from said optical axis of said lens, said peripheral portion of said anterior optic having substantially zero refractive power.

Appl. No. : 10/017,920
Filed : December 11, 2001

4. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein said posterior optic further comprises a central portion extending radially inward from said peripheral portion toward said optical axis of said lens, said central portion having a negative refractive power.

5. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein said refractive portion of said anterior optic has a refractive power of less than 30 diopters.

6. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein said peripheral portion of said posterior optic has a refractive power of about 20 diopters.

7. (PREVIOUSLY PRESENTED) An accommodating intraocular lens for implantation in an eye having an optical axis, said lens comprising:

an anterior portion comprised of a viewing element, said anterior viewing element comprised of an optic having a refractive power of less than 55 diopters;

a posterior portion comprised of a viewing element;

said lens having an optical axis which is adapted to be substantially coincident with the optical axis of the eye upon implantation of said lens;

said posterior viewing element comprising an optic arranged substantially coaxially with said anterior optic on said optical axis of said lens, said posterior optic having a larger diameter than said anterior optic, said posterior optic comprising a peripheral portion having positive refractive power and extending radially away from said optical axis of said lens beyond the periphery of said anterior optic, so that at least a portion of the light rays incident upon the posterior optic can bypass said anterior optic;

wherein said anterior portion and said posterior portion are configured to move relative to each other along said optical axis of said lens between an accommodated state and an unaccommodated state in response to force on said intraocular lens by the ciliary muscle of the eye, said anterior optic and said posterior optic being separated by a greater distance in the accommodated state than in the unaccommodated state.

8. (PREVIOUSLY PRESENTED) The lens of Claim 7, wherein said anterior optic has a diameter of about 3 millimeters or less.

Appl. No. : 10/017,920
Filed : December 11, 2001

9. (PREVIOUSLY PRESENTED) The lens of Claim 7, wherein said posterior optic further comprises a central portion extending radially inward from said peripheral portion toward said optical axis of said lens, said central portion having a negative refractive power.

10. (PREVIOUSLY PRESENTED) The lens of Claim 7, wherein said anterior optic has a refractive power of less than 30 diopters.

11. (PREVIOUSLY PRESENTED) The lens of Claim 7, wherein said peripheral portion of said posterior optic has a refractive power of about 20 diopters.

12. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein at least one of said viewing elements is a removable optic.

13. (PREVIOUSLY PRESENTED) The lens of Claim 12, wherein at least one of said viewing elements comprises a frame member defining a void thereon, wherein said frame member is capable of receiving said removable optic.

14. (PREVIOUSLY PRESENTED) The lens of Claim 13, wherein said removable optic is attached to said frame member.

15. (PREVIOUSLY PRESENTED) An accommodating intraocular lens for implantation in an eye having an optical axis, said lens comprising:
an anterior portion comprised of a viewing element;
a posterior portion comprised of a viewing element;
said lens having an optical axis which is adapted to be substantially coincident with the optical axis of the eye upon implantation of said lens, said anterior portion being configured to move relative to said posterior portion along said optical axis of said lens in response to force on said intraocular lens by the ciliary muscle of the eye;

 said posterior viewing element comprising an optic, said posterior optic comprising an inner portion and a peripheral portion, said inner portion having a first refractive power, said peripheral portion having a second refractive power which is different from said first refractive power.

Appl. No.
Filed

: 10/017,920
: December 11, 2001

16. (PREVIOUSLY PRESENTED) The lens of Claim 15, wherein said anterior viewing element comprises an optic having a refractive portion.

17. (PREVIOUSLY PRESENTED) The lens of Claim 16, wherein said anterior portion is further configured to move relative to said posterior portion between an accommodated state and an unaccommodated state, said anterior optic and said posterior optic being separated by a greater distance in the accommodated state than in the unaccommodated state.

18. (PREVIOUSLY PRESENTED) The lens of Claim 16, wherein said peripheral portion of said posterior viewing element extends radially away from said optical axis of said lens beyond the periphery of said refractive portion of said anterior optic, so that at least a portion of the light rays incident upon the posterior optic can bypass said refractive portion of said anterior optic.

19. (PREVIOUSLY PRESENTED) The lens of Claim 18, said peripheral portion of said posterior viewing element has positive refractive power.

20. (NEW) The lens of Claim 1, wherein the force by the ciliary muscle is due to relaxation of the ciliary muscle such that tension is increased in the zonules of the eye.

21. (NEW) The lens of Claim 7, wherein the force by the ciliary muscle is due to relaxation of the ciliary muscle such that tension is increased in the zonules of the eye.

22. (NEW) The lens of Claim 15, wherein the force by the ciliary muscle is due to relaxation of the ciliary muscle such that tension is increased in the zonules of the eye.

Appl. No. : 10/017,920
Filed : December 11, 2001

SUMMARY OF PERSONAL INTERVIEW OF NOVEMBER 18, 2003

In Attendance

Exr. Paul Prebilic; Reza Zadno; Mark Kertz, Reg. No. 43,711

Exhibits and/or Demonstrations

Model of capsular bag of human eye; two models of one embodiment of an intraocular lens disclosed in the present application.

Identification of Claims Discussed

1-19

Identification of Prior Art Discussed

Portney (US 6,197,058); Sarfarazi (US 6,488,708)

Proposed Amendments

None

Principal Arguments and Other Matters

Portney teaches away from relative movement of his primary and secondary IOLs. In addition, certain embodiments of the larger posterior lens can help prevent improper long distance sight when the wrong set of lenses is implanted, and certain embodiments of the larger posterior lens can also help prevent edge glare effects.

Results of Interview

The Examiner thought that the arguments presented were quite persuasive and suggested that a request for reconsideration be filed setting forth these arguments.